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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,970	10/20/2003	Benjamin David Foster	2043.090US1	4437
49845	7590	06/13/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH/EBAY P.O. BOX 2938 MINNEAPOLIS, MN 55402			LEVINE, ADAM L	
			ART UNIT	PAPER NUMBER
			3625	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant No.

10/689,970

Applicant(s)

FOSTER ET AL.

Examiner

Adam Levine

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3 October 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed March 25, 2004, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document, each non-patent literature publication or that portion which caused it to be listed, and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. The information provided has been considered.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims 1 and 11 are objected to because of the following informalities: In claim 1, please insert "one" after "at least" in the last section. In claim 11, please insert "of" after "plurality" in the first section. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the second section of the claim, it is unclear whether it is the listings or the identified term that are or is between or associated with the popularity boundaries. It is also unclear whether it is the listings or the popularity boundaries or both that are associated with the identified term and whether the listings are hosted by the network between popularity boundaries, in which case the listings presence between the boundaries would be determined by the network rather than the method. It is assumed for purposes of complete examination that it is the identified term that calls for certain popularity boundaries and that the listings are located because they are between the popularity boundaries that result from the identified term.
2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 is rejected because it is incomplete for omitting an essential element. As a result it cannot be accurately determined what is being claimed. For purposes of complete examination it is assumed that the omitted element is: "the located listing." More precisely, it cannot be determined whether "the listing time remaining on the network-based commerce system" is intended to generally apply to

the entire system, or only to the located listing. Assuming that the later is the intent, please insert "of the located listing" after "listing time" in the second line of the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-11, 21, and 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirooka (Hirooka, Y, et al., "Extending content-based recommendation by order-matching and cross-matching methods," Wlectronic Commerce and Web Technologies, 4-6 Sept. 2000, PP. 177-90).

Hirooka teaches all the limitations of claims 1-2, 4-11, 21,23-28. For example, Hirooka discloses a method for generating listing recommendations to a user of a network-based commerce system, including generating queries from identified terms and terms generated from previous user interactions. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the claims, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the

claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner. Hirooka further discloses:

- identifying a term associated with a user interaction in the network-based commerce system: (see at least abstract); user interaction includes searching a plurality of listings utilizing a search query and the identified term occurs within a search query (see at least p.181 section 3.3.1 para.2-3); user interaction includes transacting and the identified term occurs within a listing to which the transacting relates, including purchasing a product associated with one of the listings (see at least abstract, fig.3.1, p.181 section 3.2, p.182 section 3.3.2 para.1, p.184-185 section 3.5 para.2); identified term occurs within a predetermined minimum number of category-specific search queries submitted (see at least p.181 section 3.3.1 para.2-3. Please note: the predetermined minimum could be one. The method disclosed in the prior art requires at least one query and could apply to any number of queries, with the predetermined minimum also potentially representing the number of categories.), minimum number of search queries comprises search queries submitted by a plurality of users (see at least p.179 sections 2.1-2.2, p.180 section 3.1. Please note: collaborative filtering requires a minimum number of users, each of whom has a profile generated as noted above, through the analysis of their queries); identified term comprises a plurality of words (see at least p.182 section 3.3.2 para.2-3 (series of nouns treated as a single keyword). Please note: the nature of the term is not functionally involved in the recited steps of the method. The method is the same regardless. Thus,

this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106.).

- identifying the term includes: retrieving data related to a previous user interaction, determining category data related to a listing associated with the previous user interaction, retrieving at least one popular search term associated with the category data, and generating the recommended listing based on the popular search term (see at least abstract, fig.3.1, p.181 section 3.3.1 para.2-3, section 3.2; p.182 section 3.3.2 para.1, para.3; p.183 para.1, p.184-185 section 3.5 para.2. Please note: weighting keywords based on frequency of appearance is the same as determining popularity of the search term); determining if any one of a plurality of popular search terms match any portion of a title of a listing (see at least figs.3.3,3.4; p.182 section3.3.2); ranking the matches based on popularity of the popular search terms when a plurality of popular search terms match the title (see at least figs.3.3,3.4; p.182-183 section 3.3.2. Please note: For functional purposes, matching a keyword or search term to the title is the same as matching it to any other portion of the item's description. The title could be defined as the description or at least part of the description. The distinction has no functional effect on the method. It is therefore not functionally involved in the recited steps of the method. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP

2106.); selecting the popular search term ranked based on its ranking (see at least p.182-183 section 3.3.2.

- automatically generating a recommendation query including the identified term: (see at least abstract).
- running the recommendation query against a plurality of listings to identify at least one recommended listing: (see at least abstract, p.178 para.2).
- presenting the at least one recommended listing to a user of the network-based commerce system: (see at least p.178 lines 3-5, para.2).
- a communication engine: (see at least p.178 section 1 para.4).
- a database engine: (see at least p.177 section 1).
- a search engine: (see at least p.177 section 1).

Pertaining to system claims 21,23-24, and 28

Rejection of system claims 21,23-24, and 28 is based on the same rationale as noted above.

Pertaining to machine readable medium claims 25-27

Rejection of machine readable medium claims 25-27 is based on the same rationale as noted above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 12-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirooka in view of Ryan (US Pub. No. 2003/0055831).

Hirooka discloses all of the above as noted under the 102(b) rejection. Hirooka teaches viewing a list of items purchased, viewing a list of items in response to search queries, and making recommendations based on both known information regarding purchases and known information regarding items that were not purchased, but Hirooka does not disclose user interaction including viewing the plurality of listings and the identified term is associated with the listings viewed, and does not disclose a server. Ryan discloses viewing a list of items in response to search queries, and recommendations based on both known information regarding purchases and known information regarding items that were not purchased, and also discloses user interaction including viewing the plurality of listings and the identified term is associated with the listings viewed (see at least abstract, figs.1A,2; p.1 para.0010, p.11 para.0194, p.18 para.0307-0308). Ryan further discloses at least one of the communication engine, database engine and the search engine are provided by at least one server (see at least p.1 para.0003). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hirooka to incorporate user

interaction including viewing the plurality of listings and the identified term being associated with the listings viewed, and the server, as taught by Ryan, in order to pursue the objective of finding more recommendations are on target for the user, thereby increasing commerce using the method.

Hirooka discloses all of the above as noted under the 102(b) rejection. Hirooka teaches deriving terms from searches, using terms to generate recommendation queries, running the recommendation query against a plurality of listings to identify at least one recommended listing, and determining popularity of items previously selected. Hirooka, however, does not disclose locating listings between an upper popularity boundary and a lower popularity boundary that are associated with the identified term, determining if the located listings meet at least one predetermined criterion, ranking the located listings meeting the predetermined criterion, and selecting a predetermined number of highest ranked listings for recommendation to the user. Ryan discloses deriving search terms from searches, using terms to generate new recommendation queries, running the query against a plurality of listings to identify at least one recommended listing, and determining popularity of items previously selected. Ryan also teaches locating listings between an upper popularity boundary and a lower popularity boundary that are associated with the identified term, determining if the located listings meet at least one predetermined criterion, ranking the located listings meeting the predetermined criterion, and selecting a predetermined number of highest ranked listings for recommendation to the user (see at least abstract, figs. 1A, 2, 3A; p. 1 para. 0010; p. 4 para. 0077). Ryan further teaches:

- locating listings between an upper popularity boundary and a lower popularity boundary that are associated with the identified term: recommendation query includes the identified term, the lower popularity boundary, and the upper popularity boundary (see at least abstract, figs.1A,2,3A; p.1 para.0010; p.4 para.0077); lower popularity boundary comprises a corresponding parent level category of the identified term (see at least abstract, p.7 para.0116-0120, p.19 para.0341, p.20 para.0350).
- determining if the located listings meet at least one predetermined criterion: including listings that have a title that contains the identified term (see at least p.1 para.0005, p.9 para.0152. Also disclosed by Hirooka, see above 102 rejection. Please note: For functional purposes, matching an identified term to the title is the same as matching it to any other portion of the item's description. The title could be defined as the description or at least part of the description. The distinction has no functional effect on the method. It is therefore not functionally involved in the recited steps of the method. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106.)); determining if the listing is designated by the network-based commerce system as a listing for mature audiences, is banned by the network-based commerce system (see at least p.14-15 para.0251); determining if the listing would be returned in a search relying on the identified popular search term as the search criteria (see at least p.1 para.0005, p.9 para.0152. Also disclosed

by Hirooka, see above 102 rejection.); determining if listing time remaining on the network-based commerce system is greater than a predetermined minimum time (see at least p.6 para.0104, p.15 para.0262, p.18 para.0317); determining if the listing is available to the user based on a site through which the user is registered (see at least p.3 para.0050, p.21-22 para.0393).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hirooka to include locating listings between an upper popularity boundary and a lower popularity boundary that are associated with the identified term, determining if the located listings meet at least one predetermined criterion, ranking the located listings meeting the predetermined criterion, and selecting a predetermined number of highest ranked listings for recommendation to the user as taught by Ryan, in order to find more desirable recommendations for the user, thereby increasing commerce using the method.

Pertaining to system claim 22

Rejection of system claim 22 is based on the same rationale as noted above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Talib, US Pub. No. 2001/0044758 (Nov. 22, 2001). Teaches methods and systems for enabling efficient search and retrieval of products from an electronic

product catalog. Discloses using multiple independent hierarchical category taxonomies.


- Gregov, WO 02/19203 (March 7, 2002). Teaches user directed product recommendations.
- Radwin, US Pub. No. 2003/0050863 (March 13, 2003). Teaches targeted advertisements using time dependent key search terms. Discloses search terms based upon search queries, using queries to search results, configuring user profile based on search characteristics.
- Bulatovic, US Pub. No. 2002/0059116 (May 16, 2002). Teaches method and system for selectively displaying advertisements on a display device. Device retrieves requested information, executes algorithm to determine and display advertising pertaining to previously requested information.
- Bezos, US Patent No. 6,963,850 (November 8, 2005). Teaches assisting users in locating and evaluating items in an electronic catalog based on actions performed by members of specific user communities. Discloses users creating communities based on expressed interests or implied based on information known about users, including purchase history. Generates and makes lists of popular items available for viewing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Levine whose telephone number is 571.272.8122. The examiner can normally be reached on M-F, 8:30-5:00 Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert M. Pond can be reached on 571.272.6760. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Adam Levine
Patent Examiner
June 7, 2006


Primary Examiner